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SIXTY-NINTH REGULAR MEETING, April 17th, 1883.

Col. GARRICK MALLERY, President, in the Chair.

The election of Mr. GILBERT THOMPSON, of the United States Geological Survey, and Prof. Alexander Graham Bell, to active membership, was announced. The death of Mr. John Green Mills was also announced.

GIFTS.

From Mr. Gatschet.—Stenographic report of the German Anthropological Society, XII Congress held at Regensburg, Aug. 8, 9, 10, 1881.

Professor Mason, on behalf of the Council, reported the election of the following named gentlemen as Corresponding Members:

By way of explanation, he remarked that the committee in charge of the matter had been greatly puzzled in making a distinction between the Honorary and the Corresponding list of Foreign Members. Their only guide had been the publications of these gentlemen, which had fallen into their hands at the Smithsonian Institution, the Surgeon General's Office, and the Bureau of Ethnology. It would be greatly preferable to unite the two lists. Those written as Corresponding Members were certainly highly esteemed, and those designated as Honorary would confer a great pleasure on our Society by correspondence.

Benedikt, Moriz, Coblenz, Rhine-Prussia.
Chavero, Señor Alfredo, Mexico, Mexico.
Dawkins, Prof. W. Boyd, Manchester, England.
Dawson, George, Montreal, Canada.
Ecker, Prof. A., Freiburg, Baden.
Faidherbe, Gen., Paris, France.
Fondouce, Paul Cazalis de, Montpellier, France.
Galton, Francis, London, England.
Gozzadini, Count Giovanni, Bologna, Italy.
Hartmann, Prof. Robert, Berlin, Prussia.
Von Hellwald, Fr., Stuttgart, Würtemburg.
Howitt, Alf. W., Gippsland, Victoria.

Keane, Augustus H., London, England.
LeBon, Dr. Gustav, Paris, France.
Martin, Henri, Paris, France.
Montelius, Dr. Oscar, Stockholm, Sweden.
Nadaillac, Marquis de, Paris, France.
Orozco y Berra, Don, Mexico, Mexico.
Pinart, Alphonse, Panama.
Reclus, Elisèe, Paris, France.
Stieda, Dr. Ludwig, Dorpat, Russia.
Török, Dr. Aurèle de, Buda-Pesth, Hungary.
Wankel, Dr. A., Blansko, Moravia.
Whitmee, Rev. S. J., Dublin, Ireland.
Zaborowski-Moindron, Count, Paris, France.
Techmer, O. F., Leipzig, Germany.

THE CARSON FOOTPRINTS.

The Secretary stated that, at a recent meeting of the California Academy of Sciences, Dr. H. W. Harkness, a member of the committee appointed during the summer of 1882 to examine and report upon the discovery of fossil foot-prints at Carson, Nevada, announced the result of still more careful examinations of the tracks since that time. His later observations fully confirmed his previous opinion that the tracks are those of a hitherto undescribed species of the *genus homo*, which he names *Homo nevadensis*, Harkness, basing the description solely upon the measurements of the impressions, length of steps, length of stride, the straddle, (or distance between the rights and lefts,) and the angle of deviation from median line. Dr. Harkness also presented the provisional name of *Canis carsonicus*, for the supposed new species of wolf, only the faint impressions of the foot-prints of which were discovered.

The Secretary expressed the opinion that no one was justified in presuming to describe new species upon such meagre evidence, and especially when the subject pertained to man.

Prof. Mason said he was glad to know that Dr. Harkness had coupled his own name with the "Nevada Man;" and thought it time that the scheme proposed by Mortillet was adopted, so that

all new discoveries or startling announcements would, in every instance, be coupled with their authors in a manner similar to that adopted in biologic nomenclature.

Dr. W. J. Hoffman then read a paper entitled "Comparison of Eskimo Pictographs with those of other American Aborigines."

For the graphic representation of ideas the various tribes of North American Indians have recourse to different materials upon which to display artistic skill. These substances are not entirely the result of choice, but the selection of specific varieties may frequently be due to the scarcity of more desirable ones. That area of the United States formerly occupied by the several tribes constituting the Algonkian linguistic stock, abounds in rock carvings and records, a characteristic type and style of etching prevailing throughout, by which means the former extent of the distribution of that stock can at present be recognized. The southwestern region comprising New Mexico, Arizona, southern Colorado, Utah, Nevada, and California, also contains numerous remains of this kind, especially upon the walls of the numerous "dry washes" and The Ojibwa resorted to birch bark upon which to depict their mnemonic records and personal exploits. The Indians of the plains generally use the dressed skins and robes of buffalo, while on the northwest coast, and in Alaska, ivory and wood are employed. These are the prevailing substances, deviations frequently occurring to suit the fancy of the artist or recorder.

Rock carvings are generally found more or less abundant in regions occupied by sedentary tribes; while among the hunting tribes of the prairies, materials permitting of easy transportation are used almost exclusively.

Upon both the eastern and western slopes of the Sierra Nevada, in southern California, pictographs of elaborate design, and covering large areas of rock surface, have been found; but none of them have yet been shown to be the work of any specific tribe. During the course of my investigations in California in the summer of 1882, under the auspices of the Bureau of Ethnology, I had occasion to visit some Indians at Tule River Agency, located near the head waters of the South Fork of Tulare river, where a pictographic record was discovered which had caused considerable speculation among the few persons who had observed it. The Indians who at present occupy that region are of the Yokuts linguistic stock, and,

according to their traditions, have resided in that country for at least a century. Their ancestors were ignorant of the authors of the pictographs, and had no idea of their import.

The valley is very narrow, less than a quarter of a mile in width, and is hemmed in by high mountains on both sides. The region is full of immense bowlders, which have rolled down from the mountain slopes whence they became detached during the lapse of ages. An immense granite mass, measuring about thirty feet in length, twenty feet in height, and from twelve to fifteen feet through, is so broken that one of the lower quarters has slid from under the larger mass, so as to leave a passage way through the entire diameter, forming a sort of square chamber eight feet high and of about equal width. This passage runs in a northwest and southeast direction. The west wall of the chamber—that facing the east—has evidently been selected for its special fitness to receive the pictograph, as will be observed farther on. (Fig. 1.)

The drawings appear to have been pecked in outline with a piece of quartz or other material of similar hardness, the lines varying from a mere rugose surface to grooves one-third of an inch in depth. Where the greatest depth was attained, the coloring matter has been best preserved.

Four colors were employed in this work: black, Naples yellow, white, and red ochre. Judging from customs still in vogue, the black was probably produced by mixing finely powdered charcoal or soot with clay. The vellow and red colors are undoubtedly compounds of iron, as traces of this mineral in ochreous forms are visible in various places throughout the valley. The white pigment seems to be an infusorial earth. Upon a small, rounded bowlder at one end of the chamber are several cup-shaped depressions, which served as mortars for grinding and preparing the colors for use. Traces of color still remain; and a thin, glazed surface appeared, which turned the point of a blade, upon my attempting its removal for analysis. Glue is prepared by the Indians at this day from the hoofs of antelope or deer, and also from the tail of the beaver. That the latter animal frequented this region at one time is evident from the representation of it upon the ceiling of the chamber. Pigments are mixed in a thin solution of glue, for the purpose of causing them to adhere more securely to the surface to which they are applied.

In the present instance it appears that the drawings, after having

been outlined, received a coating of color, which may have been hammered or rubbed with a sharp stone. The slight, almost invisible fissures in the partly fractured crystals composing the rock show that the coloring matter had penetrated below the natural surface.



Fig. 1. Pictograph on a granite bowlder, on the South Fork of Tulare river, Cal.

As a rock painting, this example is the finest yet reported from this country; and the attempt at reproducing gestures of an almost universal frequency is also unique, considering the material upon which the record was made. The following interpretation is submitted, first, of the individual characters; and, second, of the information which the entire group appears to convey, and for which it was evidently intended.

No. I represents a person weeping. The arms and hands terminating in pendent fingers represent a common Indian gesture for rain; the lines drawn from the eyes downward to the breasts signify tears, weeping; a short distance below each line are three short lines, probably indicating the downward movement of the hands with pendent fingers past the face, as the common gesture for tears, weeping, is made, literally signifying, in gesture parlance, eye-rain. It is evident that the recorder intended to convey the idea that sorrow was felt by the person drawn, on account of the sufferings of others of the tribe shown in connection herewith.

Nos. 2, 3, and 4 are six individuals of different degrees of social status, as shown by the varying length of the warriors' plumes,

each of whom is represented in the act of making the sign for hunger, by passing the hands toward and backward from the sides of the body, denoting a "gnawing sensation," as expressed by the Indians. No. 4 probably denotes one who has already died of starvation, as he also makes the gesture for hunger, and is drawn in a horizontal position, a custom of indicating a dead man also found to exist among some of the Algonkins, especially the Blackfeet and Ojibwa.

Nos. 5, 6, 7, 8, and 9 are shown as making the sign for negation, a natural and almost universal gesture made by throwing one or both hands horizontally outward from the body toward the right and left. The fingers are extended, and, to make the gesture more emphatic, it almost appears as if the artist had drawn the toes similarly separated, as shown in Nos. 5, 6, and 7. The ornaments on the legs in No. 9 probably are meant for the trimmings upon the leggings.

No. 10, with the right hand and arm brought to the body, to indicate self, and the left extended to indicate direction, to go, signifies that the group contemplate going away. Now, since, as before stated, the face of the rock upon which the pictograph occurs runs northwest and southeast, the extended arm, pointing in the former direction, indicates that the course to be taken is that way. This belief is strengthened by the fact that bowlders having equally good surfaces for such a record are abundant, though no others were found of which the direction was suitable for showing the course to be taken, which it appeared necessary to do in this figure.

No. 11 is an ornamented head, with body and legs having an indefinite termination. The only interpretation that can be offered is that it represents a Shaman.

The above pictograph covers an area measuring about eight feet in height, and between twelve and fifteen feet in length, the latter being the transverse diameter of the bowlder. The largest figure, No. 1, is about six feet in length, the remaining figures are in proportion, as represented in the illustration.

Similar rock pictures are said to occur about fifteen or twenty miles northwest of this locality, and at a point about ten miles northeast; though I had no opportunity to personally examine their appearance and condition, or to note whether there was any relationship existing between all of them as to general import and artistic design.

It appears from a study of this pictograph that the people who made it had come to this locality as the advance party of a tribe in search of a better country, and, after a residence of an indefinite period, found that the subsistence necessary for the support of their tribe was not to be obtained. The record also appears as a notice to their successors to hasten their travels in the direction indicated toward the northwest.

That game and vegetable food were not in sufficient abundance is inferred from the elaborate representation of various plants, insects, and birds, upon the ceiling of the chamber, all directed towards the pictograph upon the side wall. Between the two series are a bald eagle and a beaver, accurately drawn, both transversely, and apparently heading off the other objects, the eagle before the birds and small animals, and the beaver in front of the plants and insects.

To further illustrate the reproduction of gestures in pictographs, I shall present a few examples taken from specimens in the museum of the Alaskan Commercial Co., of San Francisco, California, and from drawings prepared by an Alaskan Indian whom I met in that city during the summer of 1882. The latter are in imitation of drawings made upon wooden slats, to give notice of departure from home. The strip of wood upon which the figures are drawn is placed at the door, or upon the roof, and so secured that one end inclines in the direction taken by the maker, who is also the occupant of the dwelling. (Fig. 2.)

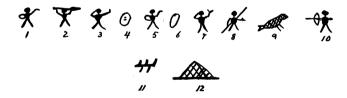


Fig. 2. Innuit drawing on wood; two-thirds natural size.

- No. 1. The speaker, with his right hand indicating himself, and with his left pointing in the direction to be taken.
- No. 2. Holding a boat paddle, signifying that he is going by boat.
- No. 3. The right hand placed to the side of the head to denote sleep, and the left, with one finger elevated, to signify one, viz: one night.

- No. 4. The island where he proposes to spend one night. The central spots denote habitations.
- No. 5. Repetition of No. 1.
- No. 6. Another island, apparently uninhabited.
- No. 7. Repetition of No. 3, with the addition of having two fingers elevated to show that he intends to rest two nights.
- No. 8. The recorder with his harpoon, making the gesture for sea lion with the left hand. (This sign is made by placing the flat hand edgewise, with the thumb extended and elevated, then pushed outward and downward in a slight curve.)
- No. 9. A sea lion.
- No. 10. Shooting with a bow and arrow.
- No. 11. A canoe with two persons, the lower projections representing the oars. This signifies that after the object of the journey has been attained, he will return.
- No. 12. The recorder's house toward which his boat is directed.

This interpretation was also given to me in gesture language, as well as in the Ki'ate' amut dialect of the Innuit language, of which the following is the text, with literal translation:

$\mathbf{H}\mathbf{u}\mathbf{i}$	ta-wa'-ut		ai-wi′-χa-na
I	there [to tha	t place]	go [by boat]
kui-gi'-qta that isla			a-χi-lu'-muk one
ka-wa'-χa- sleep [night	•	tca-li' then	hui I
ai-wi'-lu-a go			a-xa-mŭn (to) another
kui-gi'-qta that islan			ta-wa'-ni there
ma-lu'-qnŭ two	ik		ka-wa-χa-lu'-a, sleeps [nights],
hui I	pĭ-qlı catcl		a-χĭ-lu'-mŭk one
wi-na'-mŭl sea lion	-	ca-li' then	a-ni-xlu'-a return
nu'-nan [to] place			m'nun. mine.

In the above text, as well as in others herewith submitted, c represents the sound of sh; χ the sound of ch, in the German word ach, nacht; and q the sound of j in Spanish mujer. Vowels have continental pronunciation.

Another example, obtained under similar circumstances to the preceding, further illustrates the drawing of gestures. (Fig. 3.)



Fig. 3. Innuit drawing on wood; two-thirds natural size.

- Nos. 1, 3, 5, 7 represent the same person addressed. His being armless evidently shows his passive state in the record.
- No. 2 indicates the speaker, his right hand being placed against his body to denote *self*, *I*; the left hand is raised and points in the direction he is to take.
- No. 4. The elevation of both hands with fingers and thumbs extended and separated, denotes many, according to my informant. It might as well signify ten; but the increased size of the hand is evidently intended as a superlative, as this method was adopted by the ancient Mexicans to denote plurality, and also appears to exist among the Ojibwa to signify increased quantity.
- No 6. The right hand placed to the head denotes *sleep*. Nos. 4 and 6 indicate, therefore, *many sleeps*, or, in other words, many days and nights. The left hand is directed downward and outward, meaning *at that place*, which he proposes to visit or has visited.
- No. 8. The right hand is directed toward the starting point; while the left arm is brought inward, pointing over the head, to signify that he intends to come back to the place indicated.

The above may be summed thus: I am going away to remain many days; after which I shall return. The following is the Kiateyamet text, with literal translations:

Hui	a-qtei'kua	a-χla′mŭn
I	go	(to) another
nu-na'-mŭn		am-lic'-ka-mŭ'-ik
settlement		many

ha-wa'-za-lu-a ta-wa'-nĭ tca-lī' hui sleeps there then I a-ni-glu'-a. return.

The accompanying illustration represents one method of notifying passing friends of the destitute condition of the occupants of a lodge. (Fig. 4.) The drawing is made on the smooth surface of a strip of wood; the lower end is stuck in the ground at a conspicuous point in the road or trail, so that the top points toward the house.



Fig. 4. Innuit drawing on wood; one-half natural size.

- No. 1. Denotes the baidarka, or skin canoe, showing the recorder to be a fisherman.
- No. 2. Is an individual with both hands thrown outward from the body, corresponding to the common gesture for *negation*, *nothing*. This is similar to the characters upon the Californian pictograph.
- No. 3. Another human figure with one hand placed to the mouth, signifying to eat, the left being directed to—
- No. 4. The habitation. The whole signifies that there is nothing to eat in that house.

The representation of the gesture for *negation*, *nothing*, as here given, is similar to Nos. 5, 6, 7, 8, and 9 of the Californian pictograph above mentioned.

In representing a person dead or killed, the style of drawing by the Alaskans is very similar to that of the Ojibwa. Frequently, as in some rock carvings attributed to the Blackfeet, we observe simply a horizontal line for either idea; if the person has been killed, the manner in which death was caused is generally represented, as by the bow and arrow, the spear, or by decapitation after being wounded. Headless bodies are found in many of the carvings from Alaska, and also upon the bark scrolls of the Ojibwa, a figure in the latter condition being represented in the accompanying sketch of a record taken from an Ojibwa pipe stem. (Fig. 5.) I venture to submit an interpretation, based upon a knowledge of

most of the characters obtained at various times and of which the signification is known.



Fig. 5. Ojibwa record on pipestem; one-half nat. size.

The topmost figure is a bear, colored blue in the original, and probably relates to the *gens* of which the recorder, or subject of the record, is a member. A heart drawn above the line extending backward from the mouth usually indicates bravery, and it is presumed that three hearts in the present instance imply provocation or anger.

The second figure, consisting of a circle, perhaps a shield, upon which is drawn a triradiate character, has reference to the personal totem of the individual. The central figure resembles, to some extent, a character frequently met with to signify stars, though in that case the lines connect the small discs and do not concentrate at any given point, as in the present instance.

The seven angular characters represent the lodges of the village where the recorder lived, and immediately beneath them is shown a waving band from left to right, signifying that the village was located near a river.

Beneath this are two persons, each grasping a gun with the left hand, and a third holding a spear, all of whom are members of the tortoise gens, as shown by the representation of that reptile in the same space. The upward curve, extending from side to side, is the sky; and the rayed circle immediately below the left extremity signifies that the sun was at that point of the sky when the fact narrated occurred. This interpretation is based upon the custom common to almost all tribes of facing the south when making the several gestures for day, or the dif-

ferent periods of a day, and beginning with the right hand at the eastern, or *left hand* side. Even when the points of the compass are not observed the gesture is always made from the left to the right. Hence it is to be inferred that the pictograph refers to early morning. The headless character below the sun denotes the victim, who was a woman, as is shown by the skirt. The figure of a crane shows that she belonged to the crane gens. In the next figure of a bear, the hearts are beneath the line connected with the mouth, signifying sorrow. The reversed position also seems to denote that the perpetrator of the deed experienced remorse, and offered the sacred pipe, the last figure, to appease the wrath of the Great Spirit.

From the above it is evident that a warrior of the Bear gens, in company with three of the Tortoise gens, for some reason or other, killed a woman of the Crane gens early one morning. Whether the murder was intentional—as appears to be the case from the position of the hearts in the first figure—or accidental, remorse was felt, and an offering made.

A similar custom of drawing a headless body, to signify death, is also found among the Eskimo, and an illustration is presented herewith which was copied from the original sketch on walrus ivory, (Fig. 6,) now in the collection of the Alaska Commercial Company of San Francisco, California.



Fig. 6. Innuit carving on ivory.

The left-hand figure, resembling a long handled fan surmounted by the image of a bird, is a "Shaman stick," or more properly, perhaps, a votive offering, or a grave stick, as it is termed by some Indians.

The middle figure, that of a headless man, denotes the person who had been killed. In his right hand is a spear or harpoon.

The right-hand figure signifies the person who committed the murder. His hand and arm are in the position of the termination of the gesture to kill, which is made by thrusting the closed hand earthward before the body. To prevent his having ill luck in hunting and fishing, and to appease the anger of the spirit of the departed, he has erected a "Shaman stick," placing upon it the emblem of a bird, the best that can be offered. The belief prevails that flying gods are good ones, and such as crawl or swim, evil ones.

The interpretation given in the Aigalúzamut dialect of the

southern Innuit will explain the character of the pictograph more fully, and serve also to show what a native can learn from a simple record.

Nu-na'-mu-qul Place to	τ'	a′-χ′-l-χik′ quarrel	
ai'-ba-li (with) one another	to-qgu'-ql (one) killed him (S	
tcuk knife	nac-qui' took head	glu-gu' off	
i-no'-qtclu-gu laid him down (burie	ed)	ga-sa'ha-lik' Shaman	
na-bon' stick	ca-gu'-lŭk bird	a-gu'-nŭ-qua-glu-hŭ' to set (or place) on the top of (upon))

A personal exploit, recording the death of an enemy by an arrow at the hands of the recorder, is given in the accompanying sketch, (Fig. 7,) reproduced from an Eskimo carved implement in the



Fig. 7. Innuit carving on ivory.

museum of the Alaska Commercial Company. In this instance neither the absence of the head, nor any other method of showing death, as the erection of a "grave stick," was necessary, since the weapon which produces that effect was sufficient.

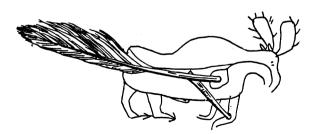


Fig. 8. Ojibwa sketch on bark.

Although the Ojibwa usually represent a dead man by drawing his totem in an inverted position upon the grave post, an

animal which has been killed is shown in an ingenious manner in the accompanying illustration, (Fig. 8,) copied from a bark scroll which was obtained from the Indians at Red Lake, Minnesota.

A moose was wounded in one of the fore legs, which is shown by the introduction into that extremity of a small peg of wood. This caused the animal to travel so slowly that it was finally overtaken and shot in the heart with an arrow and killed, as shown by the quill, the shaft of which penetrates the heart.

As this method of recording transactions and events upon birch-bark scrolls has been almost, if not entirely, discontinued, it is of the utmost importance to visit the various bands of the Ojibwa in order to collect such examples as may still be preserved with religious care, and in order to obtain interpretations of every form and variety of characters from the older and better informed Indians who may still be familiar with these interesting methods of pictographic representation.

The value of immediate investigation and comparison can be fully realized from the fact that there are tribes now living who have entirely forgotten such methods of delineation, although their association and intercommunication with the whites date from a later period of time than that of the Ojibwa.

Finally, the death of an individual may be signified by the presence of a grave stick or "Shaman stick," without any other indications. This is shown in the annexed sketch, (Fig. 9,) copied from an analysis in the museum above mentioned. In this



Fig. 9. Innuit carving on ivory.

instance, the survivor is shown holding on to the corner of the house with one hand, and with the other indicating the position of the individual—under ground—to whose memory he erected the offering. The deceased was one who shared his house, and was rather a fellow hunter than his spouse, as in the latter case a board showing articles of daily use would have been erected, the top presenting a rounded termination upon which would have been outlines of a woman's face.

The following illustration, (Fig. 10,) forming one of several

records of a personal nature, was copied from an ivory bow used in making fire, in the museum of the Alaska Commercial Company, of San Francisco. I was assisted in the interpretation of the most obscure portions of the narrative by a Kadiak mixed-blood, who was fortunately discovered in that city during the time of my investigations.

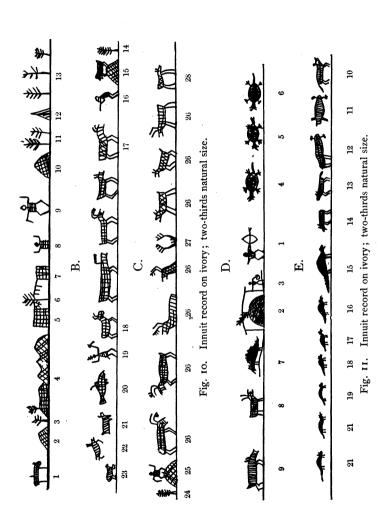
A represents one-half of the entire length of the bow, and shows the beginning of the narrative.

B and C are continuous, though upon another face of the bow. The explanations of the characters are here given:

1. A baidarka, or skin boat, placed upon poles for drying. 2. A winter habitation, known by being round topped. 3. A tree. 4. Winter habitations. 5. A store house. 6. A tree. 7. A store house. The rod connecting the latter with the tree, and another extending from the tree to No. 5, are placed in this position for drying fish. The entire series from 1 to 7 represents a village or settlement, the home of the narrator. 8. The hunter, or narrator, sitting on the ground in an attitude of supplication. He is asking the Shaman for success in the chase. 9. The Shaman. Incantations are performed by making short circular movements with the hands, above and on either side of the head. A Shaman is always drawn with one or both hands elevated, and the gesture for this personage is made as if he were performing such ceremonies. In the present instance the left arm is still raised, while the right is extended toward the supplicant, signifying that the request has been granted. 10. The Shaman's winter lodge. 11. Trees surrounding the habitations of this individual. 12. The Shaman's summer habitation. 13. Trees in the vicinity of the houses.

Another side of the bow presents the result of the chase, viz:

B. 14. A tree near the hunter's lodge. 15. The hunter's lodge. The desired success having been granted, the personal totem, or perhaps tutelar god of the hunter, is erected upon the roof of the habitation, as a mark of gratification and to insure greater success in the undertaking. The character could not be identified specifically, and may be unintelligible to any one save the hunter who adopted it, perhaps on account of its representing a mythical animal. 16. The hunter in the act of shooting. 17, 18. The game encountered, consisting of five deer. 19. The demon sent out by the Shaman to drive game in the way of the hunter. 20–23. Assistants to the demon.



C presents the fact that the hunter had previously applied to another Shaman for aid, but was refused, and the animals were bidden to depart and not permit themselves to be discovered.

24. A tree near the Shaman's lodge. 25. The Shaman standing upon the roof of the lodge, having just concluded his incantations, the left arm being raised as if to drive back the approaching game, while the right arm is brought earthward and rather more toward his person. In *giving* the arm is directed more toward the supplicant than in the present instance. 26. Deer, which had approached during the incantations, the first one having already turned about with a rather crest-fallen appearance. 27. Horns of a deer protruding above the water of a stream across which it is swimming. 28. Young deer. Recognized by smaller body and long legs.

The following text in the Ki'ate' zamut dialect, with literal translation, is of interest as showing both the syntactical structure, and the order in which the same narrative was given in gesture language:

Nu-nǔm'-cu-a Settlement man	u-χla'-qa came	pi-cu'-qi-a hunting
ku'-da go	ku-lu'-ni wanted (to) (and)	ka-χa'-qa-lŭk' Shaman (he) asked
ka'-χla-qlǔm' Shaman		mi-na\-qa-lu-qu' gave to him
ta-χli'-mu-nŭk fire		tu-du'-ia-nŭk deer
ka'-χla'-lŭk Shaman	u'-qli-ni went to top of	u ⁿ -i-lum' lodge
kai'-na-nŭn' (where) standing on top	he	ka-χa'-hu-pi-gu' made spirits (incantations)
i'-u-nĭ devil	(wa	au'-qkua-glu-hŭ' s) sent to him (the hunter)
te'-itc-lu-gĭ' (and) brought		ta-χli'-mu-nŭk' five
tun-du'-ia-nŭk deer		tau'-na-cŭk same man
pi-χlu-nĭ' he caught		ta-χli'-mu-nŭk' five
tun-du'-ia-χa-nŭk' deer [<i>pl. form</i>]		tu'-gu-χli'-u-qi killed

a-χli'-lum Another ka'-χla-qlŭm' Shaman

tu-mu'-qtcu-gi' did not grant request

Another narrative from the same locality presents the manner of recording success in the chase. The animals are not as well drawn as those upon more recent ivory workmanship, and the specimen from which the annexed figures were copied appears to be a very old one. (Fig. 11.)

The story is to the effect that the recorder desired the number and variety of animals drawn; those having their heads directed toward the lodge are the ones which he secured, while those with their heads turned away are others which he desired but which he did not get.

The drawing in the original is continuous, but has here been divided; therefore, to understand the context, the left-hand end of D should be joined to the right-hand end of E. The following is an explanation of the several characters:

1. The hunter whose success is depicted. 2. Winter habitation, with smoke issuing from the opening in the roof. The cross-piece of wood, supported by two vertical poles, is used for drying skins and fish. 3. The hunter's companion. 4, 5, 6. Three beavers. 7. A porcupine. 8, 9. Deer. 10. A wolf. 11. A seal. 12. A walrus. 13. A fox. 14. A bear. 15. A land otter. 16. A weasel, according to the interpretation given, although there are no specific characters by which it could be distinguished from the succeeding figures. 17, 18, 19, 20, 21. Martens.

Ki'ate'zamut Text.

Hui'-nu-na'-gra I (from) my place		hui'-pu-qtu'-a I went
pi-cu'-qu-lu'-a hunting		mus'-qu-li'-qnut (for) skins of animals
pa-mu'-qtu-lit'	ta-hi'-měn	a-mi'-da-duk'
martens	five	weasel
a-χla-luk'	a'-qui-a'-mŭk	pi-qu'-a
one	land otter	caught
a-χla-luk'	ku-qu'-lu'-nu-muk	a-xla-luk'
one	wolf	one

tun'-du-muk _{deer}		tu'-gu-qli'-u-gu' I killed
me-lu'-ga-nuk'	pe'-luk	pi-nai'-u-nuk
two	beavers	three
nu'-nuk	pit'-qu-ni'	ma-klak'-muk
porcupine	I caught none	seal
pit'-qu-ni'	a-ci'-a-na-muk	pit'-qu-ni'
I caught none	walrus	I caught none
wa-qi'-la-muk	pit'-qu-ni'	ta-gu'-xa-muk
fox	I caught none	bear
pit'-qu-ni' I caught none		

The same narrative was also given in gesture signs, and the text shows the exact order of their execution and sequence, a result not often obtained when comparing sentences given in both oral and gesture language by other tribes south of the forty-ninth parallel of latitude.

The accompanying drawing, (Fig. 12,) was also copied from a piece of walrus ivory in the museum of the Alaska Commercial Co., of San Francisco, California. The carving was made by a Kiate' xamut Indian of southern Alaska, and represents the success of a Shaman in curing two patients.



Fig. 12. Innuit carving on walrus ivory.

The following explanation of the several characters will suffice:

1, 2. A Shaman's summer habitation, showing trees growing in the vicinity. The fact of their being placed upon the houses denotes that the houses stand in the shade. 3. The Shaman, who is represented in the act of holding one of his "demons" in reserve, to aid in the expulsion of the disease should the previous treatment fail. According to the natives, the sick are possessed of "devils," who will duly leave the body at the approach of a superior demon, such as the Shaman is believed to control. 4. The Shaman's de-

mon. 5. The same Shaman, going through the preliminary performance of exorcising the demons that cause the sickness of the two patients. 6, 7. Men who have just been relieved of sickness. 8. Two evil spirits fleeing from the bodies of the patients under manipulation by the Shaman.

From the large amount of pictographic material examined thus far, both upon the rocks in the various portions of the United States, where they were originally designed, and on various substances now preserved in both public and private collections. I can safely state that the work of the Eskimo is greatly superior to that of any other in the faithful delineation of natural objects, especially of animate forms. The Ojibwa bark records are probably next in order; but, on account of the introduction of mythical beings and mnemonic characters, the only means of obtaining interpretations is a thorough knowledge of their ceremonies and mythology. This is applicable also in the study of pictographs of other tribes; though it is evident that in many instances an intimate acquaintance with the gesture language, or I might with more propriety say the several gesture dialects, will be of more value, since the attempted reproduction of gestures and signs is of constant occurrence. Of the latter class the California pictograph already mentioned is an excellent example. The same advancement in recording the gesture language is also noticed in many of the Eskimo drawings.

The Chinese characters, the Egyptian hieroglyphs, and some of the Maya and Mexican drawings show abundant evidence of having originated in pictographic delineation of objects and actions. It is chiefly in the representation of subjective ideas that the aboriginal artist fails; but when the lines and curves corresponding to the movements of the hands in gesture were once delineated, one of the greatest obstacles in the graphic representation of ideas was overcome, and we may therefore conclude that a careful study of the gesture signs and their comparison with pictographs will lead to the surest results.

Mr. Dorsey, in referring to the fact that demons were supposed to aid the Shaman in bringing game in the way of the favored hunter, stated that the Kansas represent upon their mythologic chart a "venerable man," who is supposed to go out and call in the game.

Mr. Jeremiah Curtin then read a paper on "Illustrations of Mythology from Slav and Magyar Folk-lore."

ABSTRACT.

Folk-lore is the entire stock of wisdom accumulated by the unlettered masses of mankind in all ages and nations. Like language, it is the product neither of one mind nor a given number of minds, but of all the various groups which, together, form humanity; like language, it is in the possession of all men, common property bequeathed by anonymous ancestors or predecessors. As there is no nation, tribe, or group of persons without language, there is none without folk-lore, which, in a broad sense, is the fruit of the intellectual activity of men before they are modified by what is called education, and represents their religion, philosophy, and literature, if the latter term may be used with reference to people unacquainted with letters.

The first illustration was taken from the Magyar story of Mirko, the King's Son, in which a sword moves continually and cuts on every side, guarding the hero while asleep, so that a fly cannot reach him; this sword has its parallel in the sword of the 3d chapter of Genesis, last verse, "which turned every way to keep the way of the Tree of Life." The most characteristic incident of the story is that of turning a diamond castle into an apple, and then turning the apple back into a castle after the hero returns home. case is found in the Russian story, Dawn, Twilight, and Midnight, where each of the three kingdoms of Gold, Silver, and Copper shrinks into an egg, is carried away in the pocket of a woman, and becomes a kingdom again at her desire, which is a process similar to that of making an acorn a tree in a few minutes, and then turning the tree into an acorn again, or like that in the 2d Book of Kings, 20th chap., where it is stated that the sun was turned back 10 degrees as a sign to King Hezekiah that he would recover from his illness. In all these cases the same principle is involved, namely, that of reversing the direction of forces now acting in the universe, of going back to yesterday and last year, of undoing an accomplished deed. Fate and predestination were illustrated from a Serbian tale, and the power of the word which creates and destroys, from Russian lore and the great feast, the Ramayana, produced by the prayers of the mighty sage Bharadwaja, who entertained an army of more than a million of men.

DISCUSSION.

Prof. Mason said that, so far as this combined learning of different peoples was concerned, the whole world seemed akin.

Prof. Thomas referred to the publication several years ago of a collection of myths of the New World, and also to a later publication of hero myths, in the latter of which there are psychologic deductions at variance with the former.

Dr. Fletcher then presented a scheme of nomenclature for the stature of the human body.

After referring to the several methods which had been adopted, the classification of Professor Zoja was submitted for the consideration of the Society.

SEVENTIETH REGULAR MEETING, May 1st, 1883.

Col. GARRICK MALLERY, President, in the Chair.

GIFTS.

From the Society.—Proceedings of the Davenport Academy of Natural Sciences; being the part III of Vol. III, 1883.

Bulletin of the Philosophical Society of Washington, Vol. IV, 1881, and Vol. V, 1883.

From the General Secretary of the Congres Internationale Des Américanistes.—A circular with reference to the general meeting to be held at Copenhagen during the coming summer.

Mr. Gatschet then read a paper on

THE SHETIMASHA INDIANS OF ST. MARY'S PARISH, SOUTHERN LOUISIANA.

The wide area of Louisiana was once the home of a large number of Indian tribes, whose names and locations are mentioned by the historians of the early colonies. These Indians were distinct from each other in language as well as in race, and if an investigator, of scientific attainments, had visited all of them 150 years ago, he would have probably discovered over forty dialects, belonging to at least eight linguistic families. Unfortunately, such a work was not undertaken at a time when it was possible to perform it, and all that we can do now is to collect the last remnants of a world of